

Features

- Double offset design reduces seal wear
- High quality, 316SS (CF8M) valve body, disc, and stem
- Reinforced Teflon (RTPFE) seats for expanded temperature range
- Heavy-duty, single piece cast & machined disc with integral mounting sleeve
- Spring loaded seat cover for easier removal and replacement of the valve seat
- Multi-voltage capable with auto-voltage sensing
- Long life brushless motor
- External LED power on and diagnostic light
- IP67 polyamide weatherproof enclosure with UV protection
- Electronic torque limiter - protects against valve jams
- Anti-condensation heater
- Manual override with dome style visual valve position indicator
- Electrical connections via external DIN plugs
- Auxiliary limit switches to confirm open/closed valve position

Applications

High performance wafer butterfly valves are used to control the flow of waters, oils, air, certain caustics, and other media compatible with the materials of construction for general service and where an expanded temperature range or higher pressure is required. Actuators designed for 75% duty cycle.

Operation

Electric actuated valve uses power-to-open and power-to-close, stays in the last known position with power failure. On receipt of a continuous voltage signal, the motor runs and via a flat gear system rotates the disc 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position.

Construction

Valve Body	316 stainless steel CF8M
Disc	316 stainless steel CF8M
Disc Seat/Liner	RPTFE
Stem/Stem Seals	17-4PH/316SS/ V-ring (same material as seat)
Actuator Enclosure	Anti-corrosive Polyamide, UV protection
Manual Override/Position Indicator	Glass-filled Polyamide / Clear Polyamide Dome
Auxiliary Limit Switches	2 x SPST 3A@125/250VAC, 30VDC resistive load
Fasteners	Stainless Steel



Description

Electric operated direct mount high performance butterfly valves with 316 stainless steel wafer body are designed for commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 125/ 150 flanges. Disc is precision machined 316SS. Double offset design to reduce seal wear. Rugged long life brushless electric actuator includes a manual override, thermostatically controlled anti-condensation heater, and over-torque protection.

Approvals

Actuators

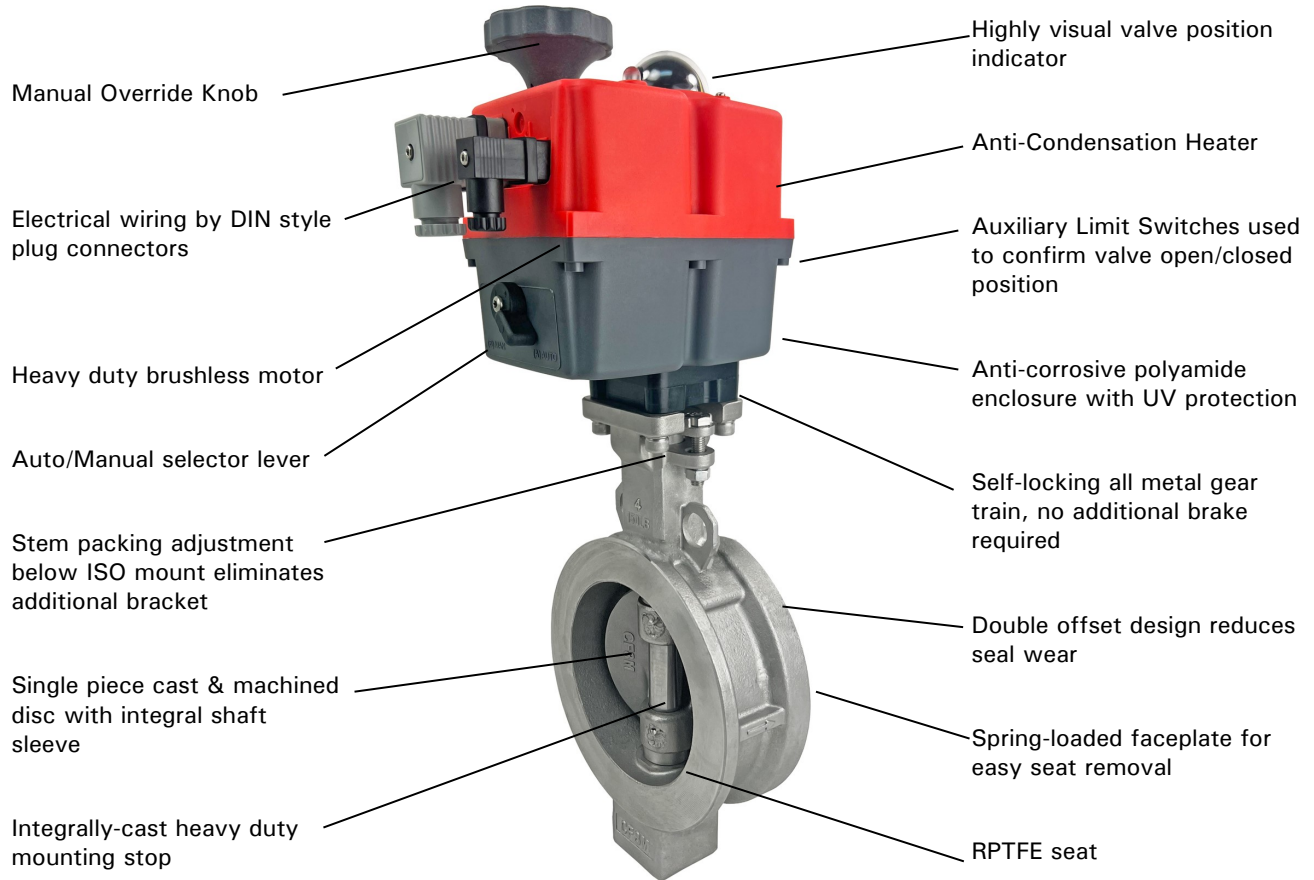
- CE mark conformance: EN 60204-4/68/UE
 - Machinery directive
 - Low voltage directive
 - EMC Compatibility directive

- ISO5211 valve mounting

Valves- Standards

- ANSI/ASME B16.5 CLASS150
- ANSI/ASME B16.1 CLASS125
- EN1092 PN10, PN16
- JIS B 2239 10K, 16K
- CE conformance- PED 2014-68/UE

Construction Features



Pressure Rating

Pressure Rating: 285 PSI (19.7 Bar)

Temperature Rating

Actuator Temperature Rating: -4 to +158° F (-20 to 70° C)

Valve Temperature Rating: RPTFE seals: -20 to 500° F (-29 to 260°C)

Optional Functions

BSR: Battery Spring Return Kit

- actuator fails to a safe position with loss of power

DPS: Digital Positioning System

- valve disc position controlled by 4-20mA or 0-10V control signal

Specifications (English units)

Stock Number	Pipe Size (inch)	Orifice Diam. (inch)	Cv Flow Factor	Pressure Max. (PSI)	Fluid Media*	Cycle Time /90° (sec) +/-10%	Max. Current Draw (Amps)			
							110VAC	240VAC	24VAC	24VDC
HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS: 24-240V AC or DC										
569903	3	2.9	165	285	Water	29	0.3	0.2	1.5	1.2
569904	4	3.8	400	285	Water	29	0.3	0.2	1.5	1.2
569906	6	5.6	1050	285	Water	58	0.8	0.5	3.3	2.7
569908	8	7.4	2200	285	Water	58	0.8	0.5	3.3	2.7

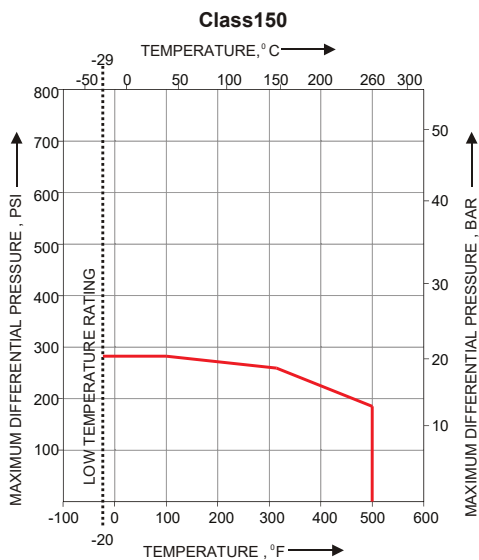
Cv is the GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop
 * Consult compatibility chart for other media. Suitable for vacuum up to 29 inHg
 Models with 240 volt are single phase

Specifications (Metric units)

Stock Number	Pipe Size (DN)	Orifice Diam. (mm)	Kv Flow Factor	Pressure Max. (Bar)	Fluid Media*	Cycle Time /90° (sec) +/-10%	Max. Current Draw (Amps)			
							110VAC	240VAC	24VAC	24VDC
HIGH PERFORMANCE WAFER BODY BUTTERFLY VALVE, RPTFE SEALS: 24-240V AC or DC										
569903	80	73.7	143	19.7	Water	29	0.3	0.2	1.5	1.2
569904	100	96.5	346	19.7	Water	29	0.3	0.2	1.5	1.2
569906	150	142.2	908	19.7	Water	58	0.8	0.5	3.3	2.7
569908	200	188.0	1903	19.7	Water	58	0.8	0.5	3.3	2.7

Kv= The number of m³ per hour of 20° C water at 1 bar pressure drop
 * Consult compatibility chart for other media. Suitable for vacuum up to 29 inHg
 Models with 240 volt are single phase

PT Chart

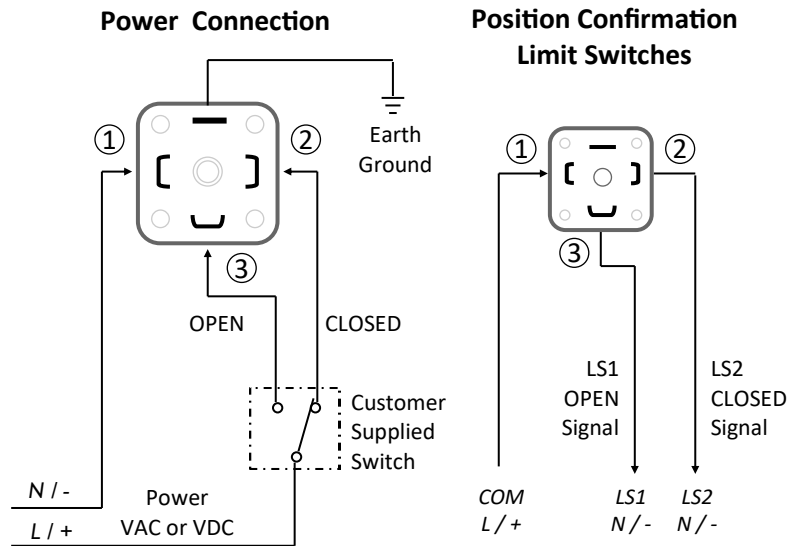


Rated value for 150 Lb body			
Temperature °F	Temperature °C	CF8M (PSI)	CF8M (bar)
-20.2 to 100.4	-29 to 38	275.6	19.0
199.4	93	235.0	16.2
300.2	149	214.7	14.8
399.2	204	194.4	13.4
500	260	169.7	11.7

Electrical Wiring: On/Off and BSR Battery Spring Return Versions

Voltage: 24-240 Volts AC or DC, 1ph, -0/+ 5%

Auto-voltage sensing



Function: ON-OFF version

Power Connections

Power to PIN 1 and 2
- actuator CLOSED (pos 1)

Power to PIN 1 and 3
- actuator OPEN (pos 2)

Stays in last known position with loss of power.

Function: ON-OFF version with BSR option

Wiring is the same as standard ON-OFF version.

Power to open, power to close - maintain power to trickle charge the battery system in either open or closed position.

Actuator sent by battery power to failsafe position with power failure.

Actuator returns to pre-failure position on power resumption.

Function: Position confirmation limit switches

Dry contact 3A @ 125/250 VAC, 30VDC resistive load

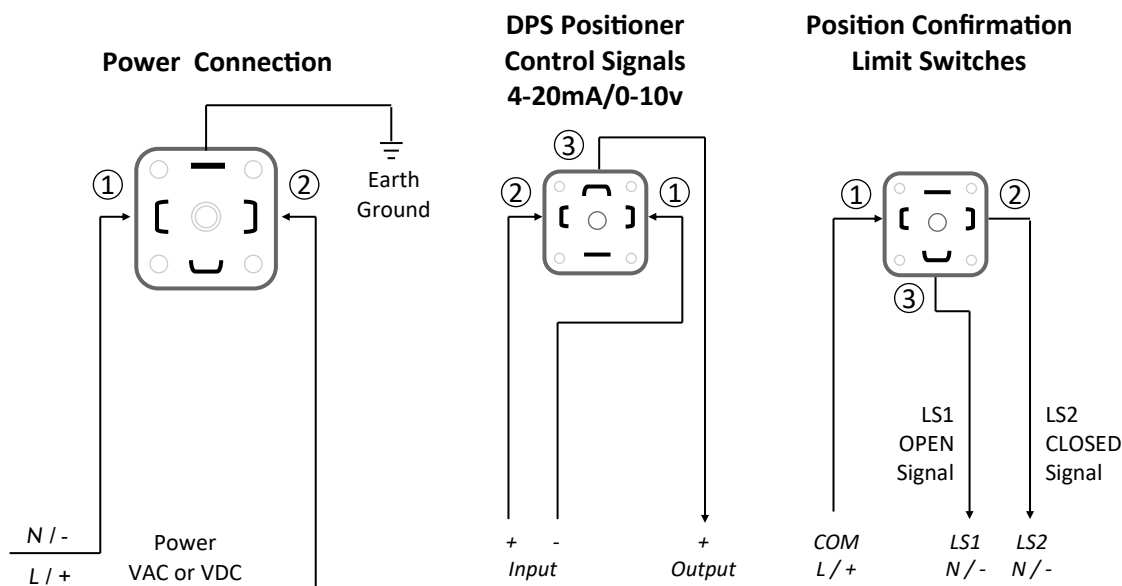
PIN 1 (COM) and 2 to confirm actuator is closed

PIN 1 (COM) and 3 to confirm actuator is open

Electrical Wiring: Actuators with DPS Digital Positioner Option

Voltage: 24-240 Volt AC or DC Models (auto-voltage sensing)

Control Signal: 4-20mA or 0-10 VDC



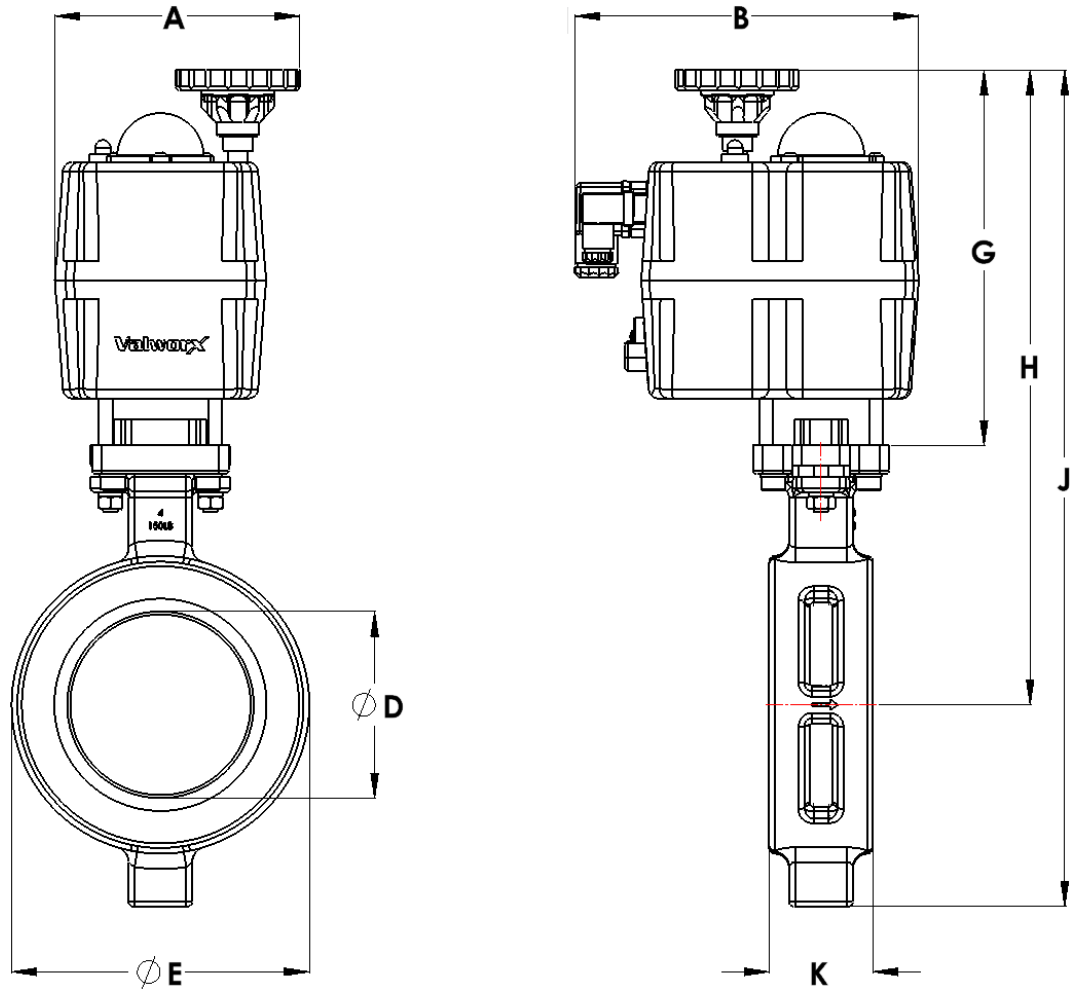
Function: Actuators with DPS—Digital Positioner Option

Power open, power close - actuator movement controlled by 4-20mA or 0-10VDC input signal.
 Standard operation: 4mA or 0V = actuator closed, 20mA or 10V = actuator open (can be set-up reverse acting).
 Actuator closes with loss of control signal, stays in last known position with loss of main power.
 Output monitoring signal (in same format as supply signal) provided as standard.

Function: Position confirmation limit switches

Dry contact 3A @ 125/250 VAC, 30VDC resistive load
 PIN 1 (COM) and 2 to confirm actuator is closed
 PIN 1 (COM) and 3 to confirm actuator is open

Dimensions:



Suitable between flanges:

- ◆ ANSI/ASME B16.5 CLASS150
- ◆ ANSI/ASME B16.1 CLASS125
- ◆ EN1092 PN10, PN16
- ◆ JIS B 2239 10K, 16K
- ◆ BS 10 Table D, Table E

Pipe Size		A	B	D	E	G	H	J	K	ISO	Weight
3	inch	4.3	7.0	2.8	5.2	7.7	12.5	16.0	1.9	F05	16.5 lb
DN80	mm	110.0	177.0	72.0	131.0	196.0	317.5	406.4	49.0		7.5 kg
4	inch	4.3	7.0	3.7	6.1	7.7.0	13.0	17.1	2.1	F05/F07	19.1 lb
DN100	mm	110.0	177.0	94.0	155.0	196.0	330.2	434.3	54.0		8.7 kg
6	inch	8.5	9.1	5.5	8.5	10.0	16.0	22.0	2.2	F07	35.3 lb
DN150	mm	217.0	232.0	140.0	216.0	255.0	406.4	558.8	57.0		16.0 kg
8	inch	8.5	9.1	7.3	10.6	10.0	17.8	24.6	2.5	F10	47.1 lb
DN200	mm	217.0	232.0	185.0	270.0	255.0	452.1	624.8	64.0		21.4 kg

Dimensions remain unchanged for all versions (On-Off, BSR failsafe & DPS positioning)